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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/330,755	06/11/1999	STUART B. BERMAN	223/279	9796

7590

04/09/2003

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EXAMINER

RYMAN, DANIEL J

ART UNIT

PAPER NUMBER

2665

11412

DATE MAILED: 04/09/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/330,755

Applicant(s)

BERMAN, STUART B.

Examiner

Daniel J. Ryman

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 20 February 2003.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 50-55 and 56-63, renumbered 66-73, respectively is/are pending in the application.
- 4a) Of the above claim(s) 56-63, renumbered 66-73, respectively is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 50-55 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____
- 4) ☐ Interview Summary (PTO-413) Paper No(s). _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

DETAILED ACTION

Election/Restrictions

1. Newly submitted claims 56-63, renumbered 66-73, are respectively directed to an invention that is independent or distinct from the invention originally claimed for the following reasons: claims 50-55 are concerned with a port control module, and as such are classified in 370/395.71, while claims 56-63, renumbered 66-73, are concerned with an interconnect system using port control modules, and as such are classified as 370/391. Thus, the invention is deemed to be a combination-subcombination with the subcombination not being essential to the combination.

Since applicant has received an action on the merits for the originally presented invention, this invention has been constructively elected by original presentation for prosecution on the merits. Accordingly, claims 56-63, renumbered 66-73, withdrawn from consideration as being directed to a non-elected invention. See 37 CFR 1.142(b) and MPEP § 821.03.

Claim Objections

2. The numbering of claims is not in accordance with 37 CFR 1.126 which requires the original numbering of the claims to be preserved throughout the prosecution. When claims are canceled, the remaining claims must not be renumbered. When new claims are presented, they must be numbered consecutively beginning with the number next following the highest numbered claims previously presented (whether entered or not).

Misnumbered claims 56-63 have been renumbered 66-73.

3. Claim 54 is objected to under 37 CFR 1.75(c), as being of improper dependent form for failing to further limit the subject matter of a previous claim. Applicant is required to cancel the

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claim(s), or amend the claim(s) to place the claim(s) in proper dependent form, or rewrite the claim(s) in independent form. Claim 54 discloses that the detectable signal is tag bits; however, claim 53 was amended to include the limitation that the detectable signal is tag bits. Therefore claim 54 fails to limit claim 53.

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims 50, 51, 53, and 54 are rejected under 35 U.S.C. 103(a) as being unpatentable over Bennett et al (USPN 5,592,160) in view of Gulick (USPN 4,809,269) in further view of Lowell (USPN 5,341,476).

6. Regarding claims 50, 53, and 54, Bennett discloses a method and a port control module (ref. 340) for use in a fiber channel switching fabric comprising (col. 4, lines 22-45): a fiber channel input/output port for connection to a link (col. 1, line 57-col. 2, line 5), an encoder/decoder in communication with the input/output port (col. 2, lines 37-63) where "encoding" and "decoding" indicates the presence of an encoder/decoder, and a buffer (col. 2, lines 15-22 and col. 4, lines 39-45); where the module places received fiber channel data in the buffer before sending the data to another module (col. 2, lines 15-18), and monitors the buffer for an overflow condition (col. 5, lines 49-66) with an overflow buffer indicating a monitoring of an overflow condition. Bennett also discloses buffer overrun prevention (ref. 436, overflow buffer) (col. 5, lines 58-66). Bennett possibly does not disclose the inclusion of buffer overrun

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prevention logic between the encoder/decoder and the buffer. Gulick teaches, in a port controller, having buffer overrun prevention logic before the buffer (col. 30, lines 25-39). Since the buffer overrun prevention logic is before the buffer, an obvious place to locate it would be between the buffer and the encoder/decoder. Gulick uses the buffer prevention logic in order to signal the system to terminate a packet that has been corrupted by buffer overflow through the use of tags (col. 30, lines 34-39). It would have been obvious to one of ordinary skill in the art of data communications to include buffer prevention logic before the buffer to signal the system that a data packet has been corrupted due to buffer overrun. Bennett in view of Gulick possibly does not disclose the buffer overrun prevention logic tags, but does not terminate, words that overrun the buffer. Lowell discloses in a buffering system that a variety of overflow buffer configurations are possible, including a "Reject" type of buffering in which the newest data in the buffer is overwritten by the overflow data (col. 3, lines 31-33; col. 7, lines 4-25, esp. col. 7, lines 15-25; and col. 8, lines 50-66). It is obvious that by using a "Reject" type of buffering that the port control module of Gulick is relieved of the need to terminate packets. Instead, once an overflow is detected, the port control module simply needs to flag the packets that are in overflow and pass the packets to the buffer where all overflowed packets will be terminated when a newer overflowed packet overwrites it. Thus it would have been obvious to one of ordinary skill in the art at the time of the invention to have the buffer overrun prevention logic tag, but not terminate, words that overrun the buffer in order to relieve the prevention logic of the task of terminating the packet before it reaches the buffer.

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7. Regarding claim 51, Bennett in view of Gulick in further view of Lowell discloses that the buffer is FIFO (Bennett: col. 2, lines 60-63; Gulick: col. 30 lines 25-27; and Lowell: col. 7, lines 15-20).

8. Claims 52 and 55 are rejected under 35 U.S.C. 103(a) as being unpatentable over Bennett et al (USPN 5,592,160) in view of Gulick (USPN 4,809,269) in further view of Lowell (USPN 5,341,476) as applied to claims 50 and 54 above, and further in view of Tom et al. (USPN 5,262,625).

9. Regarding claims 52 and 55, referring to claims 50 and 54, Bennett in view of Gulick in further view of Lowell discloses that the buffer overrun prevention logic sets tag bit to a value indicative of overrun conditions (Gulick: col. 30 lines 30-39). Bennett in view of Gulick in further view of Lowell does not specifically disclose that the tagged value is unique. Tom discloses having the tagged values be unique in order for the system to distinguish between unique conditions associated with each tag (col. 10 lines 11-22). It would have been obvious to one of ordinary skill in the art of data communications to have the tag be unique in order for the system to distinguish between the unique conditions associated with each tag.

Response to Amendment

10. Applicant's arguments with respect to claims 50-55 have been considered but are moot in view of the new ground(s) of rejection.

11. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Daniel J. Ryman whose telephone number is (703)305-6970. The examiner can normally be reached on Mon.-Fri. 7:00-5:00 with every other Friday off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Huy Vu can be reached on (703)308-6602. The fax phone numbers for the organization where this application or proceeding is assigned are (703)308-6743 for regular communications and (703)308-9051 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703)305-3900.

Daniel J. Ryman
Examiner
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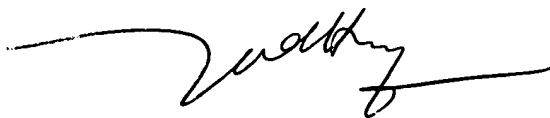
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Daniel J. Ryman

April 3, 2003

DJR



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